

# SNS COLLEGE OF PHYSIOTHERAPY

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Coimbatore – 641035

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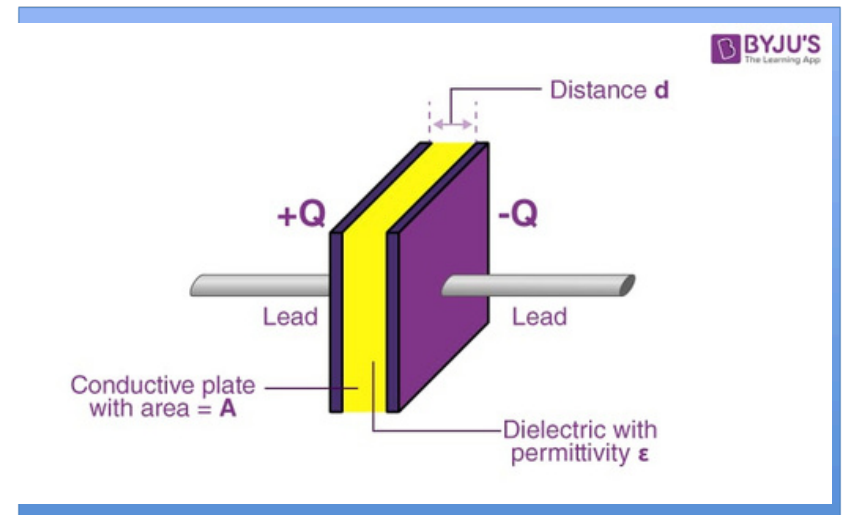
**COURSE NAME** : Basic physics and biomechanics

**SUBJECT CODE** : 6273

**TOPIC** : Empathize: Patient with Muscle Weakness

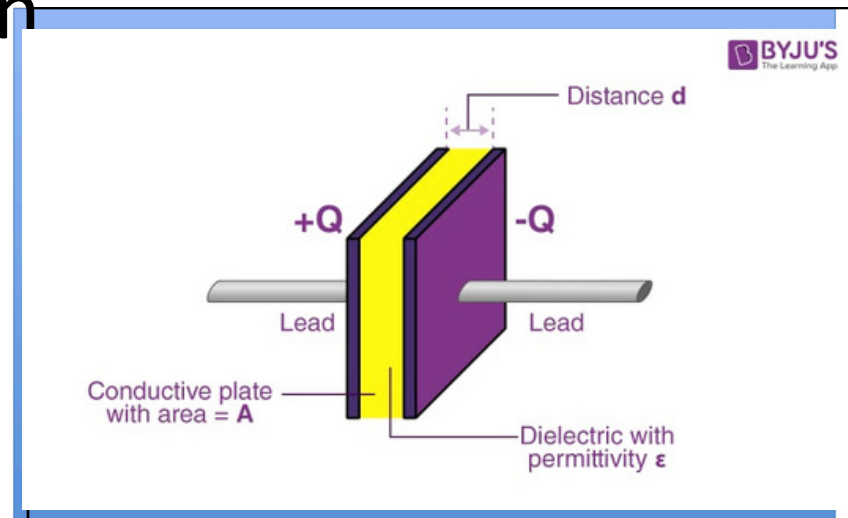
# Empathize: Patient with Chronic Shoulder Pain

- Deep-seated pain Muscle stiffness
- Poor local circulation Pain not
- relieved by superficial heat



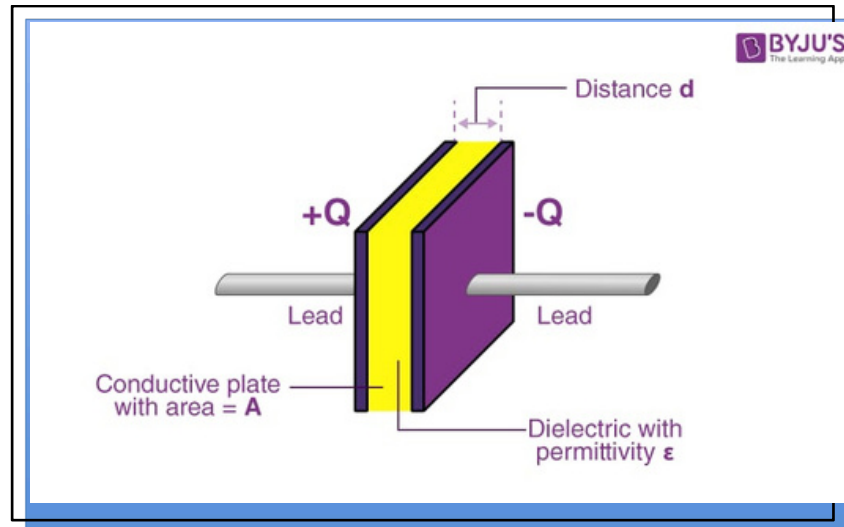
# Empathize: Clinical Examination

- Tender deep muscles Normal skin sensation
- Reduced ROM due to pain
- No inflammation signs



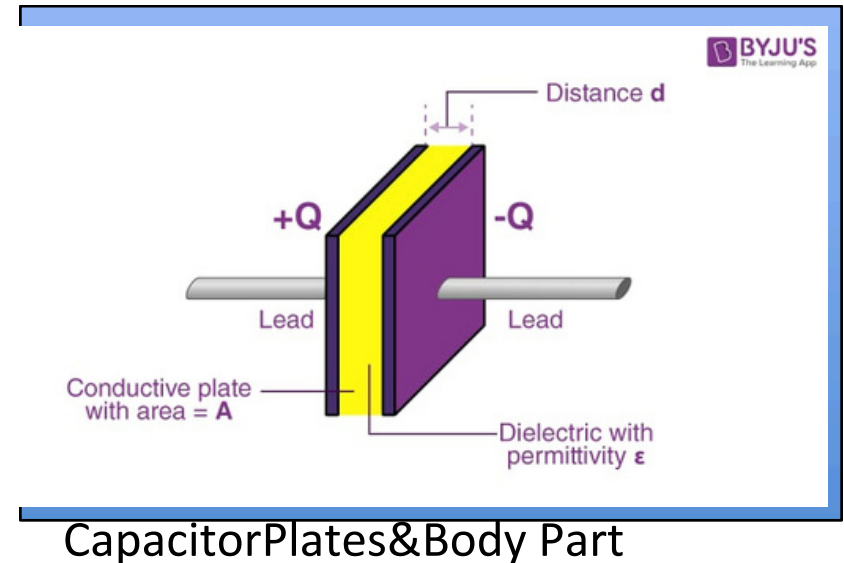
# Define: Clinical Problem

- Chronic musculoskeletal pain
- Poor deep tissue heating
- Reduced blood flow
- Muscle spasm



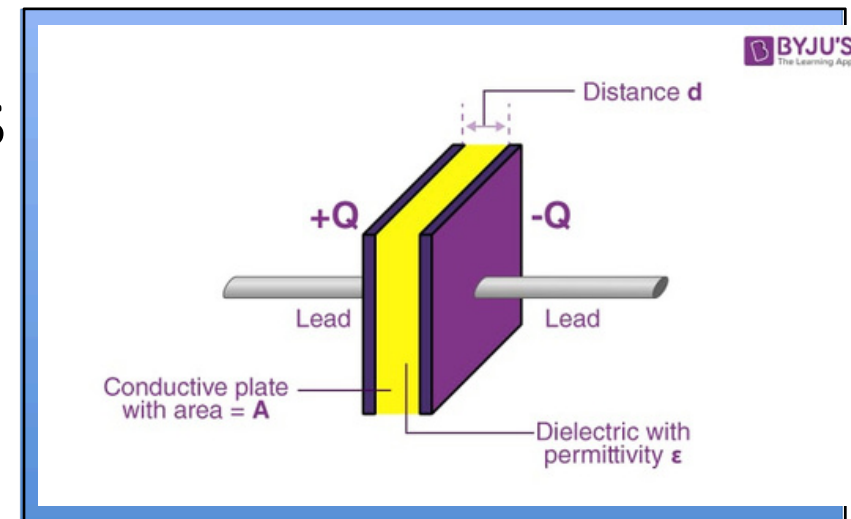
# Define: Treatment Goals

- Produce deep heating
- Relieve pain Reduce
- muscle spasm
- Improve circulation



# Ideate: Principle of Capacitor Method

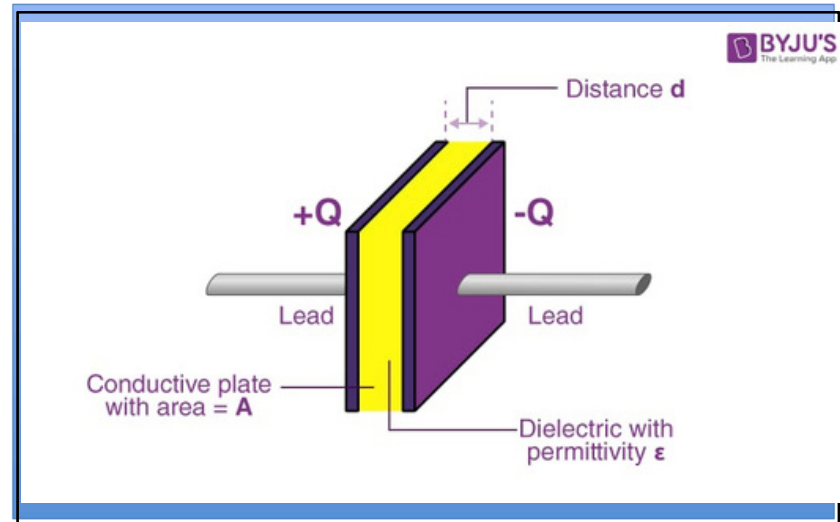
- Patient forms part of capacitor
- Tissues act as dielectric AC
- passes via plates Heat
- generated in deep tissues



# Ideate: Electrode (Plate) Arrangement

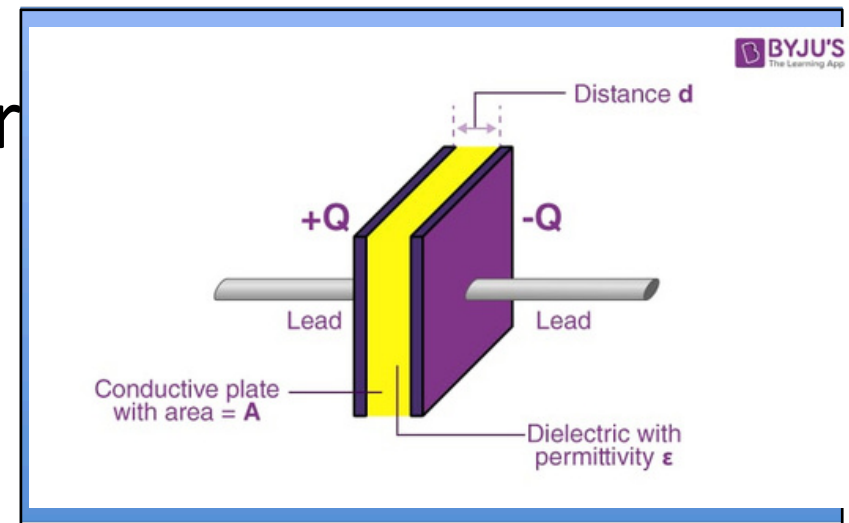
- Area to be treated in between
- Two condenser plates used
- Equal plate size preferred
- Good insulation maintained

Diagram: Capacitor Plates & Body Part



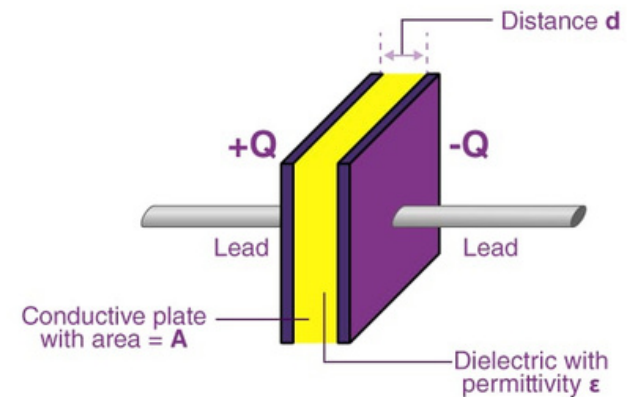
# Prototype: Treatment Parameters

- Duration: 15–20 minutes
- Adequate spacing
- Frequency: SWD range
- Intensity to comfortable war



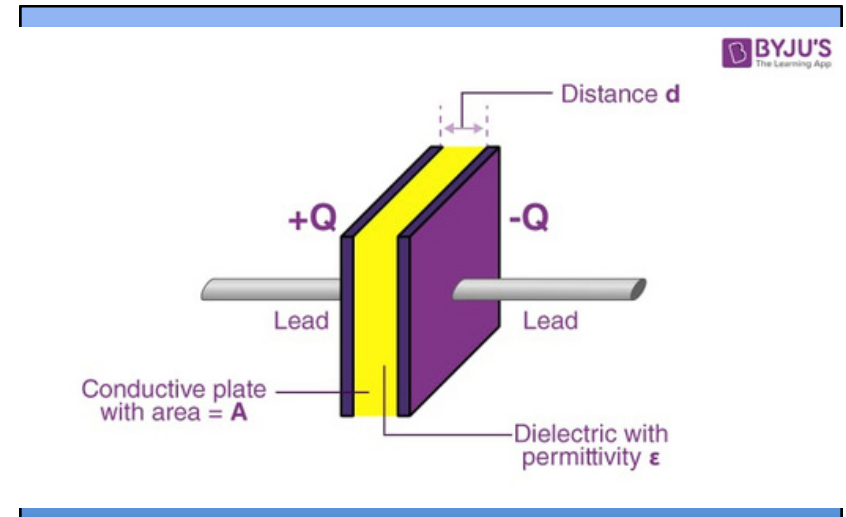
# Prototype: Treatment Session

- Explain procedure
- Check skin regularly
- Monitor heat sensation
- Patient comfortable position



# Test: Outcome Assessment

- Pain reduction
- Improved ROM
- Muscle relaxation
- No skin burns



# Test: Clinical Reflection

- Combine with exercise
- Document findings
- Exam correlation
- Modify plate distance if uneven heating

